



Final Agenda
NASA Sounder Science Team Meeting
October 13-16, 2009
MARRIOTT GREENBELT

Tues. October 13, 2009

A.M. Light Refreshments: 7:30 - 8:00

Session 1: Introduction and Science Highlights (Chair: Chahine/Pagano)	8:00 - 11:00
---	---------------------

Moustafa Chahine	JPL	Welcome and Introduction	8:00 AM
Ramesh Kakar	NASA HQ	NASA HQ Perspective	8:30 AM
Mitch Goldberg	NOAA	Atmospheric Sounding at NOAA	9:00 AM
Claire Parkinson	GSFC	The 2009 Aqua Senior Review and other Aqua Updates	9:30 AM
<i>BREAK</i>			<i>9:50 AM</i>
Tom Pagano	JPL	AIRS Project Status	10:20 AM
Sharon Ray	JPL	EPO Status	10:40 AM

Session 2: Climate Trends and OLR (Chair: Aumann)	11:00 - 3:00
--	---------------------

George Aumann	JPL	Climate Quality of AIRS Data Products	11:00 AM
Antonia Gambacorta	NOAA	Investigating the Water Vapor Feedback from the Atmospheric Infrared Sounder	11:20 AM
Bill Smith	University of Wisconsin/Madison and Hampton University	The Use of Spectral Sounding Radiances for Climate Analyses - Experience with AIRS	11:50 AM

LUNCH ***12:10 - 1:40***

Mitch Goldberg	NOAA	AIRS Climate Quality Limb Adjusted Radiances and OLR	1:40 PM
Joel Susskind	GSFC	Validation of Anomalies and Trends of OLR Derived from AIRS/AMSU over the Period of September 2002 through August 2009	2:00 PM
Stephen Eckerman	NRL	AIRS Observations of Orographic Gravity Wave Dynamics in the High Latitude Southern Hemisphere	2:20 PM
Jonathan Wright	Columbia University	Event Based Climatologies Using Satellite Data: A Trajectory Approach	2:40 PM

BREAK ***3:00 PM***

Session 3: Clouds and Dust Products and Science (Chair: Kahn)	3:20 - 5:20
--	--------------------

Brian Kahn	JPL	Characterizing Clouds with AIRS: An Overview and Future Perspective	3:20 PM
Bryan Baum	University of Wisconsin/Madison	Ice Cloud Radiance Simulations with MODIS and IR Spectral Imagers: Implications for MODIS Collection 6 Cloud Products	3:40 PM
George Aumann	JPL	Trends in Clouds based on 7 Years of AIRS Data	4:00 PM
Mathias Schreier	JPL	Synergistic use of AIRS/MODIS by using Spatial Response Information - an Investigation of Radiance Differences Sorted by Cloud and Atmospheric Quantities	4:20 PM
Bill Blackwell	MIT	Robustness Assessments of Neural Network and Linear Regression Profile Retrieval Methods	4:40 PM
Thomas Hearty	GSFC	Status of AIRS data at GES DISC and Data Support Activities	5:00 PM

ADJOURN ***5:20 PM***



Final Agenda
NASA Sounder Science Team Meeting
October 13-16, 2009
MARRIOTT GREENBELT

Wed. October 14, 2009

A.M. Light Refreshments: 7:30 - 8:00 a.m.

Session 4: Forecast Improvement and Data Assimilation (Chair: Lambrigtsen)	8:00 - 11:00
---	---------------------

**Fiona Hilton	UKMet Office	An Investigation into IASI Temperature and Humidity Retrievals	8:00 AM
**Louis Garand	Environement Canada	Improved cloud height retrieval for AIRS/IASI assimilation and model validation	8:20 AM
Lars Peter Riishojgaard	JCSDA	Recent AIRS and IASI Activities in the Joint Center for Satellite Data Assimilation (JCSDA)	8:40 AM
Joel Susskind	GSFC	Latest Forecast Impact Experiments Assimilating Quality Controlled Version 5 AIRS Temperature Profiles	9:00 AM
Oreste Reale	GSFC	AIRS Impact on Tropical Cyclone Analysis and Forecast	9:20 AM
BREAK			9:40 AM
Brad Zavodsky	MSFC	Newst Findings: AIRS Profiles and Data Assimilation	10:00 AM
Zhaoxia Pu	University of Utah	AIRS Data Assimilation: Bias Correction and its Impact on Numerical Simulations of Tropical Cyclone Formation and Intensity	10:20 AM
All		Roundtable Discussion	10:40 AM

Session 5: Temperature, Water Vapor Products, Validation & Science (Chair: Fetzer)	11:00 - 3:10
---	---------------------

Eric Fetzer	JPL	V5 and V6 Validation Plans and Status	11:00 AM
Bill Irion	JPL	Operational RAOBs for AIRS Validation	11:20 AM
Mark Zelinka	University of Washington	Response of Humidity and Clouds to Tropical Deep Convection	11:40 AM
LUNCH			12:00 - 1:30
Murty Divarkala	NOAA	The AIRS/IASI Temperature and Water Vapor Retrievals - Plans for CrIS/ATMS	1:30 PM
Mark Zondlo	Princeton	Comparison of Water Vapor from AIRS and the VCSEL Hygrometer during the NSF START08 and HIPPO Global #1 Field Campaigns	1:50 PM
Nikita Pougatchev	Space Dynamics Laboratory	Validation of the AIRS V5 and EUMETSAT V4.3.1 Retrievals Cloud-Cleared and Cloud-Free Approaches	2:10 PM
Glynn Hulley	JPL	AIRS Land Surface Emissivity: V5 Validation and V5.4 Evaluation	2:30 PM
Nick Nalli	NOAA	2009 PNE/AEROS-V: Marine Validation Campaign Summary	2:50 PM
BREAK			3:10 PM

Session 6: Trace Gasses: Carbon Monoxide and Ozone (Chair: Irion)	3:30 - 5:30
--	--------------------

Wallace McMillan	UMBC	AIRS CO V5/V6 Update and from LA Fires to Houston Pollution	3:30 PM
Leonid Yurganov	UMBC	CO Variations throughout the 2000s based on AIRS V5 and MOPITT V3 Data Corrected Using NDACC/FTS	3:50 PM
Juying Warner	UMBC	Tropospheric CO Differences between Two Minimization Methods and their Validations	4:10 PM
Hiroshi Tanimoto	Japanese National Institute for Environmental Studies	Exploring CO Pollution Episodes Observed at Rishiri Island by Chemical Weather Simulations and AIRS Satellite Measurements: Long-range Transport of Burning Plumes and Implications for Emissions Inventories	4:30 PM
Jennifer Wei	NOAA	Information-Based Improvements on the AIRS Retrievals of Ozone and Methane and their Validations	4:50 PM
Saumitra Mukherjee	Jawaharal Nehru University	Electron Flux and Cosmic Ray Anomaly to Predict Atmosphere of the Earth	5:10 PM

ADJOURN **5:30 PM**

**Remote Presentation



Final Agenda
NASA Sounder Science Team Meeting
October 13-16, 2009
MARRIOTT GREENBELT

Thurs. October 15, 2009

A.M. Light Refreshments: 7:30 - 8:00 a.m.

Session 7: NPP, Sounder PEATE, GOES (Chair: Friedman)			8:00 - 10:40
Steve Friedman	JPL	Sounder PEATE Status	8:00 AM
Chris Barnet	NOAA	NPP Sounder Progress: EDR Development & Testing Progress and Development of AIRS and IASI Test Data	8:20 AM
Evan Fishbein	JPL	Facilitating Cross-Platform Instrument Comparisons at the NPP Sounder PEATE	8:40 AM
Gail Bingham	Space Dynamics Laboratory	NPP Sounder Progress: Progress in CrIS Testing and SDR Algorithm Testing Progress	9:00 AM
Denise Hagan	NGC	CrIS Status	9:20 AM
Kevin Garrett	NOAA/NESDIS/STAR	Sounding from NOAA's Microwave Integrated Retrieval System in the NPP/NPOESS Era	9:40 AM
BREAK			10:00 AM
Bob Knuteson	University of Wisconsin/Madison	Intercalibration of Broadband Geostationary Imagers with AIRS	10:20 AM
Robert Schweiss	GSFC	Poster: An Overview of the Science Data Segment	
Session 8: Special Session on Sounding Community Needs (Chair: Lambrigtsen)			10:40 - 12:00
Bjorn Lambrigtsen	JPL	Report on Previous Sounding Community Workshop of 05/07/09	10:40 AM
Eric Fetzer	JPL	Findings of the Keck Workshop on Water Vapor and Clouds	10:50 AM
TBD	TBD	TBD	11:00 AM
Wallace McMillan	UMBC	Needs of Atmospheric Composition Community from Atmospheric Sounders	11:20 AM
Discussion	All	Discussion	11:40 AM
LUNCH			12:10 - 1:30
Session 9: Trace Gases: Carbon Dioxide and NO2 (Chair: Ed Olsen)			1:30 - 5:00
Julie Wallace	McMaster University	The Effect of Temperature Inversions on Ground Level NO2 and PM2.5 using Temperature Profiles from AIRS - A Community Level Application	1:30 PM
Larrabee Strow	UMBC	AIRS Lower Tropospheric CO2 Climatology: Validation and Comparison to NOAA's Carbon Tracker	1:50 PM
Larrabee Strow	UMBC	Direct, Simultaneous Retrieval of Minor Gas Trends with No Prior Information using Radiance Derivatives	2:10 PM
Ed Olsen	JPL	7 Years of AIRS Mid-Tropospheric CO2	2:30 PM
Eugenia Kalnay	UofM College Park	AIRS CO2 Data Assimilation with Ensemble Kalman Filter in NCAR Carbon-Climate Model	2:50 PM
BREAK			3:10 PM
**Steve Wofsy	Harvard	Global CO2 and CH4 Data at 200m Resolution: The HIPPO Aircraft Program	3:30 PM
Bill Irion	JPL	Progress on CO2 retrieval from AIRS using Optimal Estimation	3:50 PM
Anna Michalak	University of Michigan	Mapping Global CO2 using AIRS Data	4:10 PM
Discussion			4:30 PM
ADJOURN			5:00 PM

**Remote Presentation



Final Agenda
NASA Sounder Science Team Meeting
October 13-16, 2009
MARRIOTT GREENBELT

Fri. October 16, 2009

A.M. Light Refreshments: 7:30 - 8:00 a.m.

Session 10: Level 1 and AIRS, IASI Calibration (Chair: Elliott)	8:00 - 9:40
--	--------------------

Denis Elliott	JPL	Changes to Level 1 Software for V6 - Part 1 (Overview)	8:00 AM
Evan Manning	JPL	Changes to Level 1 Software for V6 - Part 2 (Technical)	8:20 AM
Larrabee Strow	UMBC	Frequency Calibration of AIRS	8:40 AM
Larrabee Strow	UMBC	Radiance Comparisons between AIRS and IASI for Climate Trends	9:00 AM
George Aumann	JPL	Radiance Comparisons between AIRS and IASI under Cloudy Conditions	9:20 AM

BREAK ***9:40 AM***

Session 11: Level 2 AIRS Version 6 Development (Chair: Aumann)	10:00 - 12:00
---	----------------------

Steve Friedman	JPL	Version 6 Program Schedule	10:00 AM
Evan Manning	JPL	Version 5 vs. Version 6 - Skill & Trends	10:20 AM
Eric Maddy	NOAA	AIRS V6: A NOAA Perspective	10:40 AM
Joel Susskind	GSFC	Results Using the Current Version 6 Candidate at SRT	11:10 AM
Tom Pagano	JPL	Discussions and Version 6 Consensus	11:40 AM

ADJOURN ***12:00 PM***